

IN THE CLAIMS

The status of the claims as presently amended is as follows:

1. (*Currently Amended*) A shift control system for a V-belt type continuously variable transmission of a vehicle in which a V-belt is wound between a primary pulley of an input side connected to an engine and a secondary pulley of an output side, a primary pulley pressure acting on the primary pulley and a secondary pulley pressure acting on the secondary pulley are generated respectively with a line pressure as an original pressure, and a shift actuator operable to an operating position corresponding to a target gear ratio, wherein a differential pressure is generated between the primary pulley pressure and the secondary pulley pressure to change widths of V-shaped grooves of the primary pulley and the secondary pulley so that an actual gear ratio that is obtained from speed ratio of the primary pulley and the secondary pulley becomes equal to the target gear ratio, the shift control system comprising:

shift control means for controlling a transmission controller configured to control the shift actuator and configured to detect a downshift of the continuously variable transmission:

a speed detecting means for detecting device configured to detect a speed of the vehicle; and

downshift detecting means for detecting a downshift of the belt-type continuously variable transmission; and

an idle state detecting means for detecting device configured to detect an idle state of the engine,

wherein the transmission controller is configured to limit an operating speed of the shift actuator to prevent slippage of the V-belt when:

the speed detected by the speed detecting means device is less than a first predetermined speed,

the downshift detecting means transmission controller detects the downshift, and

the idle state detecting means device does not detect the idle state of the engine, the shift control means limits an operating speed of the shift actuator to prevent slippage of the V-belt.

2. (*Currently Amended*) The shift control system according to claim 1, wherein the transmission controller is configured to:

set an intermediate target gear ratio is set between the actual target gear ratio and the target gear ratio, the intermediate target gear ratio being gradually brought close to the target gear ratio,

the shift control means control[[s]] the shift actuator so that the actual gear ratio reaches the intermediate target gear ratio, and

the downshift detecting means detect[[s]] the downshift when a difference is more than a predetermined value between the intermediate target gear ratio and the actual gear ratio.

3. (*Currently Amended*) The shift control system according to claim 1 or 2, wherein the shift control means transmission controller is configured to lower[[s]] an operating speed of the shift actuator when a speed detected by the speed detecting means device is less than an upshift determination vehicle speed.

4. (*Currently Amended*) The shift control system according to one of claim 1 or 2, further comprising wherein:

gear ratio comparing means for comparing the transmission controller is configured to compare the actual gear ratio and the target gear ratio,

wherein when the speed detected by the speed detecting means device is equal to or more than a second predetermined speed, the downshift detecting means transmission controller is configured to:

detect[[s]] a finish of the downshift, and the gear ratio comparing means determine[[s]] that the actual gear ratio is closer to a low side relative to the target gear ratio, and

the shift control means finishes limitation of end limiting the operating speed of the shift actuator.

5. (*Currently Amended*) The A shift control system according to claim 3, further for a V-belt type continuously variable transmission of a vehicle in which a V-belt is wound between a primary pulley of an input side connected to an engine and a secondary pulley of an output side, a primary pulley pressure acting on the primary pulley and a secondary pulley pressure acting on the secondary pulley are generated respectively with a line pressure as an original pressure, and a shift actuator operable to an operating position corresponding to a target gear ratio, wherein a differential pressure is generated between the primary pulley pressure and the

secondary pulley pressure to change widths of V-shaped grooves of the primary pulley and the secondary pulley so that an actual gear ratio that is obtained from speed ratio of the primary pulley and the secondary pulley becomes equal to the target gear ratio, the shift control system comprising:

a transmission controller configured to control the shift actuator, configured to detect a downshift of the continuously variable transmission gear ratio comparing means for comparing, and configured to compare the actual gear ratio and the target gear ratio,

a speed detecting device configured to detect a speed of the vehicle; and
an idle state detecting device configured to detect an idle state of the engine,

wherein the transmission controller is configured to limit an operating speed of the shift actuator to prevent slippage of the V-belt when:

the speed detected by the speed detecting device is less than a first predetermined speed,

the transmission controller detects the downshift, and

the idle state detecting device does not detect the idle state of the engine,

wherein the transmission controller is configured to lower an operating speed of the shift actuator when a speed detected by the speed detecting device is less than an upshift determination vehicle speed, and

wherein when the speed detected by the speed detecting means device is equal to or more than a second predetermined speed, the downshift detecting means transmission controller is configured to:

detect[[s]] a finish of the downshift,

and the gear ratio comparing means determine[[s]] that the actual gear ratio is closer to a low side relative to the target gear ratio, the shift control means and

finishes limitation of end limiting the operating speed of the shift actuator.

6. (New) The shift control system according to claim 5, wherein the transmission controller is configured to:

set an intermediate target gear ratio between the actual target gear ratio and the target gear ratio, the intermediate target gear ratio being gradually brought close to the target gear ratio,

control the shift actuator so that the actual gear ratio reaches the intermediate target gear ratio, and

detect the downshift when a difference is more than a predetermined value between the intermediate target gear ratio and the actual gear ratio.